UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,153	03/28/2001	Samuel T. Christy	WDS-014	3962

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EXAMINER
HAN, QI

TESTA, HURWITZ & THIBEAULT, LLP
HIGH STREET TOWER
125 HIGH STREET
BOSTON, MA 02110

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/820,153	CHRISTY, SAMUEL T.
	Examiner	Art Unit	
	Qi Han	2654	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-43_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-43_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _03/28/2001_.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1.   The references listed in the Information Disclosure Statement submitted on 03/28/2001

have been considered by the examiner (see attached PTO-1449).

Drawings

2.   Figure 1 should be designated by a legend such as --Prior Art-- because only that which is

old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR

1.121(d) are required in reply to the Office action to avoid abandonment of the application. The

replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR

1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted

by the examiner, the applicant will be notified and informed of any required corrective action in

the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-3, 5-6, 10-14, 16-17, 21-24, 27-28, 34 and 37-38 are rejected under 35 U.S.C.

102(b) as being anticipated by CHRISTY (US 5,884,247).

As per **claim 1**, CHRISTY discloses method and apparatus for automated language translation (title), comprising:

a.   converting a digital message in a natural language to a digital message in a pivot language, (column 2, lines 24-27, 'a natural language sentence (digital message) is translated or decomposed (converted) into the simple grammar of the invention but preserve the original vocabulary', wherein the translated or decomposed sentence (message) is in a pivot language (see specification, page 8, lines 6-17; column 13, lines 20-21, 'generating a sentence (message) in the reference language (equivalent to pivot language)'), the pivot language affording translation into a plurality of natural languages by direct substitution of linguistic units (column 2, lines 47-48, 'broadcast to multiple interlocutors each speaking a different language; Abstract, 'to permit direct substitution of linguistic units in one language for corresponding linguistic units in another language'), the converting comprising:

i.   parsing the digital message in the natural language into a plurality of linguistic units to create a parsed message (column 11, line 66 to column 12, line 2, 'using standard string-analysis (parsing), module 225 (Fig. 2) identify the separate linguistic unit and the expansion points', which necessarily results to a parsed message);

ii.   translating each of the plurality of linguistic units in the parsed message into a unique concept in the pivot language to create a provisional message (column 12, lines 2-3, 'it then compares these (the units and the points) with templates corresponding to the allowed expansion rules to validate the sentence (provisional message)'); and

iii.   validating the provisional message as the digital message in the pivot language if

the provisional message conforms to the pivot language (column 12, lines 3-5, 'to validate the

sentence (provisional message)'; 'if the sentence fails to conform to the rules... alert user'); and

b.   communicating the digital message in the pivot language to a recipient (column 2,

lines 50-55, 'formulating the messages in accordance with the invention's grammar (in the pivot

language); recipients ... implementing the invention receive the message translated into their

native language').

As per **claim 2** (depending on claim 1), CHRISTY further discloses resolving the

provisional message according to a plurality of rules of a constrained grammar, (column 1, lines

58-63, 'provides an artificial grammar', 'based on a fixed series of rules applied to an organized

natural language (the message)').

As per **claim 3** (depending on claim 1), CHRISTY further discloses prompting selection

of a unique concept from the pivot language when the linguistic unit is associated with a plurality

of unique concepts in the pivot language, (column 12, lines 35-49, 'an additional database 235

can comprise a dictionary of words (linguistic units) having multiple meanings (a plurality of

unique concepts), with the invention-recognized format of each sense of the words set next to

the various definitions. User interface 230 interprets the user's clicking on one of the definitions

as selection (prompting selection) thereof').

As per **claim 5** (depending on claim 1), CHRISTY further discloses the digital message

in the pivot language is a piece of electronic mail and the recipient is an electronic mail server,

(column 2, lines 50-55, 'correspondents can exchange messages by e-mail, ... simply by

formulating the messages in accordance with the invention's grammar (in the pivot language), which inherently includes e-mail server).

As per **claim 6** (depending on claim 1), CHRISTY further discloses the recipient is a translation module, (column 2, lines 50-55, 'recipients ...implementing the invention receive the message translated into their native language', which inherently includes a translation module receiving the message and then translating it).

As per **claim 10** (depending on claim 1), CHRISTY further discloses:

c.   converting the digital message in the pivot language into a digital message in a second natural language(column 12, lines 4, 'database lookup and translation take place' that corresponds to the claimed), the converting comprising:

i.   identifying the second natural language associated with a second recipient (column 2, lines, 'the story is instantly translated into the appropriate languages (herein inherently includes identifying the second natural language) upon arrival at the different bureaus');

ii.   accessing a database associated with the second natural language (column 11, lines 31-34, 'addressing (accessing) the database to locate the entries corresponding to each linguistic unit in the given language'); and

iii.   translating the digital message in the pivot language into the digital message in the second natural language using the database (column 11, lines 34-6, 'translates the sentence by replacing the input entries with the entries from the target language'); and

d.   communicating the digital message in the second natural language to the second

recipient (column 2, lines 66-67, 'it may then be further refined into a form suitable form (in

second/translated natural language) for communication to the audience (second recipient)').

As per **claim 11** (depending on claim 10), CHRISTY further discloses the first recipient

is the second recipient, (column 2, lines 50-55, 'recipients who have e-mail system implementing

the invention receive the message translated into their native language' that is read on the claim).

As per **claim 12**, it recites an apparatus. The rejection is based on the same reason as

described for claim 1, because the claim recites same or similar limitation(s) as claim 1.

As per **claims 13-14, 16-17, 21-22** (depending on claim 1), the rejection is based on the

same reason as described for claims 2-3, 5-6, 10-11, respectively, because the claim recites same

or similar limitation(s) as claims 2-3, 5-6, 10-11, respectively.

As per **claim 23** (depending on claim 21), the rejection is based on the same reason as

described for claim 11, because the claim recites same or similar limitation(s) as claim 11.

As per **claim 24**, it recites a method. The rejection is based on the same reason as

described for claim 10, because the claim recites same or similar limitation(s) as claim 10.

As per **claim 27** (depending on claim 24), the rejection is based on the same reason as

described for claim 5, because the claim recites same or similar limitation(s) as claim 5.

As per **claim 28** (depending on claim 24), CHRISTY further discloses directly

substituting a linguistic unit in the digital message in the pivot language with an equivalent

linguistic unit from the database associated with the natural language, (column 13, lines 27-28,

'translating the sentence by directly substituting the reference (pivot language) entries

(corresponding to linguistic units in database) with the target (the naturalness) entries'; column

11, lines 34-6, 'translates the sentence by replacing the input entries with the entries from the

target language').

As per **claim 34**, it recites an apparatus. The rejection is based on the same reason as

described for claim 24, because the claim recites same or similar limitation(s) as claim 24.

As per **claim 37** (depending on claim 34), the rejection is based on the same reason as

described for claim 27, because the claim recites same or similar limitation(s) as claim 27.

As per **claim 38** (depending on claim 34), the rejection is based on the same reason as

described for claim 28, because the claim recites same or similar limitation(s) as claim 28.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 4, 15, 25-26, 31-32, 36 and 41-42 are rejected under 35 U.S.C. 103(a) as being

unpatentable over CHRISTY as applied to claims 1, 12, 24 and 34 in view of TRUDEAU (US

5,987,401).

As per **claim 4** (depending on claim 1), even though CHRISTY discloses the digital

message in the pivot language is an instant message (column 2, lines 43-42, 'can conduct a

meeting ... in accordance with the invention' and 'broadcast to multiple interlocutors', which are

interpreted as instant message), CHRISTY does not expressly disclose "the recipient is an instant

message service". However, this feature is well known in the art as evidenced by TRUDEAU

who discloses language translation for real-time text-based conversations (title), comprising a

server to provide the on-line service (column 6, lines 20-21), including chat room (column 10,

line 25) that is instant message service. Therefore, it would have been obvious to one of

ordinary skill in the art at time the invention was made to modify CHRISTY for specifically

providing a server (recipient) having instant message service, such as chat room, as taught by

TRUDEAU, for the purpose of supporting multilingual text-based conversation (TRUDEAU:

column 1, lines 66-67).

As per **claim 15** (depending on claim 12), the rejection is based on the same reason as

described for claim 4, because the claim recites same or similar limitation(s) as claim 4.

As per **claim 25** (depending on claim 1), CHRISTY does not expressly disclose

"receiving a selection of a natural language to associate with the recipient". However, the

feature is well known in the art as evidenced by TRUDEAU who discloses language translation

for real-time text-based conversations (title), comprising user interface windows having language

selectors 706 and 708 (Figs. 8A-8D and column 11, lines 1-5). Therefore, it would have been

obvious to one of ordinary skill in the art at time the invention was made to modify CHRISTY

for specifically providing language selectors for a user interface, as taught by TRUDEAU, for

the purpose of supporting multilingual text-based conversation (TRUDEAU: column 1, lines 66-

67).

As per **claim 26** (depending on claim 24), the rejection is based on the same reason as

described for claim 4, because the claim recites same or similar limitation(s) as claim 4.

As per **claim 31** (depending on claim 24), CHRISTY further discloses causing a serving

to receive a digital message in a pivot language, (column 2, lines 50-55, 'correspondents can

exchange messages by e-mail, ... simply by formulating the messages in accordance with the

invention's grammar (in the pivot language), which inherently causes an e-mail server receiver

the message in pivot language), and converting the digital message in the pivot language into a

digital message in a natural language (column 11, lines 34-6, 'translates the sentence by

replacing the input entries with the entries from the target language').

But, CHRISTY does not expressly disclose **causing the server to convert the digital**

message. However, the feature is well known in the art as evidenced by TRUDEAU who

discloses language translation for real-time text-based conversations (title), comprising a server

to provide the on-line service (column 6, lines 20-21), and teaches that the operations (including

real time translation) of the invention could equally be provided at the host or server machine

(column 10, lines 54-64). Therefore, it would have been obvious to one of ordinary skill in the

art at time the invention was made to modify CHRISTY for specifically providing a server based

translation (conversion) for the messages, as taught by TRUDEAU, for the purpose of

advantaging the centralized operations for the on-line service (TRUDEAU: column 10, lines 58-

59).

As per **claim 32** (depending on claim 24), CHRISTY does not expressly disclose the

communicating step is performed in a mode of communication associated with the recipient.

However, the feature is well known in the art as evidenced by TRUDEAU who discloses

language translation for real-time text-based conversations (title), comprising user (recipient)

interface window that can provide one-to-one mode or one-to-many (group members) mode of

conversation (communication) (column 11, lines 1-16 and column 1, lines 22-23). Therefore, it

would have been obvious to one of ordinary skill in the art at time the invention was made to

modify CHRISTY for specifically providing communication mode(s) for a user (conversion), as

taught by TRUDEAU, for the purpose of offering user limited outgoing message selection for a

conversation (TRUDEAU: column 11, lines 10).

As per **claim 36** (depending on claim 34), the rejection is based on the same reason as

described for claim 26, because the claim recites same or similar limitation(s) as claim 26.

As per **claim 41** (depending on claim 34), the rejection is based on the same reason as

described for claim 31, because the claim recites same or similar limitation(s) as claim 31.

As per **claim 42** (depending on claim 34), the rejection is based on the same reason as

described for claim 32, because the claim recites same or similar limitation(s) as claim 32.

5.   Claims 7, 18, 29 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over

CHRISTY as applied to claims 1, 12, 24 and 34, in view of Uribe-Echebarria Diaz De Mendibil

(US 5,987,401) hereinafter referenced as MENDIBIL.

As per **claim 7** (depending on claim 1), CHRISTY does not specifically disclose

"converting the sound of a human voice into a digital message in a natural language". However,

the feature is well known in the art as evidenced by MENDIBIL who discloses automatic

interlingual translation system (Title), carrying out a first transfer of the analyzed text to an

intermediate language (interpreted as pivot language) (Abstract), and teaches that the system of

the invention is applicable not only translation systems,... but also to database management

systems and to voice recognition systems (inherent converting speech/voice into text message),

in which it assists the linguistic interpretation of voice-recognition system in order to improve

the quality of said recognition (column 5, lines 13-25). Therefore, it would have been obvious to

one of ordinary skill in the art at time the invention was made to modify CHRISTY for

specifically combining a voice recognition mechanism, for converting speech/voice to text

message, as taught by MENDIBIL, for the purpose of improving the quality of recognition

(MENDIBIL: column 5, lines 24-25).

As per **claim 18** (depending on claim 12), the rejection is based on the same reason as

described for claim 7, because the claim recites same or similar limitation(s) as claim 7.

As per **claim 29** (depending on claim 24), CHRISTY does not specifically disclose

"reorganizing the linguistic units in accordance with a grammatical rule associated with the

natural language". However, this feature is well known in the art as evidenced by MENDIBIL

who discloses automatic interlingual translation system (Title), carrying out a first transfer of the

analyzed text to an intermediate language (interpreted as pivot language) (Abstract), and teaches

that the interlingua processes all the morphological, syntactical (including grammatical rules)

and semantic features of the languages it is desired to translate (column 3, lines 36-38), and the

sentence (conferred by interlingua) in intermediate language processes all the structural

characteristics (including reorganizing linguistic units) of the target language (column 3, lines

27-34), which necessarily reorganizes linguistic units, such words order in a sentence, because

their (the two languages) linguistic (particularly syntactical) structures are different (column 4,

lines 17-18). Therefore, it would have been obvious to one of ordinary skill in the art at time the

invention was made to modify CHRISTY for specifically providing interlingua process for the

intermediate language, as taught by MENDIBIL, so that reorganized the sentence can meet the

linguistic characteristics of the target language, for the purpose of further performing formal

translation (MENDIBIL: column 5, lines 36-37).

As per **claim 39** (depending on claim 34), the rejection is based on the same reason as described for claim 28, because the claim recites same or similar limitation(s) as claim 28.

6.   Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHRISTY as applied to claims 1 and 12, in view of MENDIBIL and well known prior art (MPEP 2144.03).

As per **claim 8** (depending on claim 1), even though CHRISTY discloses that user interface generates words or graphical images on display to prompt action by the user (column 7, lines 42-46) and interprets the user's clicking on one of definitions as selection thereof and enters the proper encoding of the word into buffer (column 12, lines 38-40), CHRISTY does not specifically disclose "prompting selection of **pre-process or post-process disambiguation**". However, the feature is well known in the art as evidenced by MENDIBIL and well known prior art. MENDIBIL discloses automatic interlingual translation system (Title), carrying out a first transfer of the analyzed text to an intermediate language (interpreted as pivot language) (Abstract), and teaches a translation program that can be used in any word processor (column 5, lines 32-50), the program represents (in some way) the universal structure of the sentence reflected in the intermediate language, and the sentence is processed with the advantage of being totally unambiguous (process disambiguation) (column 61-67). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify CHRISTY for specifically combining a word processor and a unambiguous process for the sentence reflected in the intermediate language in the translation program, as taught by MENDIBIL, for

the purpose of offering clarified sentence for the interpretation/translation (MENDIBIL: column

5, lines 57-59).

Further, CHRISTY in view of MENDIBIL does not expressly disclose the word

processor and the unambiguous processes can have **a selection of pre-process or post-process**.

However, an official notice is taken that the feature of selection of pre-process or post-process is

well known in the art, such as used in a popular word processor for editing text. Therefore, it

would have been obvious to one of ordinary skill in the art at time the invention was made to

modify CHRISTY in view of MENDIBIL by specifically providing a popular word processor,

for providing prompting selection of pre-process or post-process disambiguation, for the purpose

of offering clarified sentence for the interpretation/translation.

As per **claim 19** (depending on claim 12), the rejection is based on the same reason as

described for claim 8, because the claim recites same or similar limitation(s) as claim 8.

7.   Claims 9, 20, 33 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over

CHRISTY as applied to claims 1, 12, 24 and 34, in view of MOSER et al. (US 6,275,789 B1)

hereinafter referenced as MOSER.

As per **claim 9** (depending on claim 1), as stated above, CHRISTY discloses

communicating to the recipient with the digital message in the pivot language (see claim 1). But,

CHRISTY does not specifically disclose the communicating **an applet that initiates**

translation. However, the feature is well known in the art as evidenced by MOSER who

discloses method and apparatus for performing full bi-directional translation between a source

language and a linked alternative language (Title), comprising download IAL (broadly

interpreted as pivot language) by browser (column 3, lines 55-56), applets displaying a "sign language" equivalent of the word or phrase in the source language (column 32, lines 5-6), which means the system is capable of using the browser to execute (communicate) the applet that will start a translation. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify CHRISTY for specifically providing a browser and an applet, as taught by MOSER, so that the browser can execute the applet to start a translation, for the purpose of offering rapid translation via Internet (MOSER: column 43, lines 41-42).

As per **claim 20** (depending on claim 12), the rejection is based on the same reason as described for claim 9, because the claim recites same or similar limitation(s) as claim 9.

As per **claim 33** (depending on claim 24), the rejection is based on the same reason as described for claim 9, because the claim recites same or similar limitation(s) as claim 9.

As per **claim 43** (depending on claim 34), the rejection is based on the same reason as described for claim 33, because the claim recites same or similar limitation(s) as claim 33.

8.   Claims 30, 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHRISTY as applied to claims 24 and 34, in view of well known prior art (MPEP 2144.03).

As per **claim 30** (depending on claim 24), CHRISTY does not expressly disclose synthesizing the sound of a human voice saying the digital message in the natural language. However, an official notice is taken that this feature is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify CHRISTY by specifically providing a speech synthesis mechanism for a message in a natural language, for the purpose of offering more marketable feature for a translation system.

As per **claim 35** (depending on claim 24), CHRISTY discloses "a linguistic unit

representing a unique concept in the natural to be directly" corresponding to "a linguistic unit

representing a unique concept in the pivot' (column 2, lines 14-26, 'the resulting "sentences"...

preserving the original vocabulary'; column 3, limes 60 to column 4, line 11, 'the lexicon

comprises linguistic units', 'each definition of the word (multiple meaning word) represents a

different linguistic unit', 'words unique'; column 11, lines 30-34, 'processing single linguistic

unit of the input sentence..., addressing the databases to locate the entries corresponding to each

linguistic unit in the given language'). But, CHRISTY does not expressly disclose **an index, the**

index enabling a linguistic unit representing a unique concept in the natural language to be

directly **substituted for** a linguistic unit representing a unique concept in the pivot. However, an

official notice is taken that this feature is well known in the art, because the entries

corresponding to each linguistic unit in the database can directly use indexes or can be easily

linked to indexes generated by the database. Therefore, it would have been obvious to one of

ordinary skill in the art at time the invention was made to modify CHRISTY by specifically

providing an index for each entry of a linguistic unit in a database, for the purpose of increasing

processing speed for a translation.

As per **claim 40** (depending on claim 34), the rejection is based on the same reason as

described for claim 30, because the claim recites same or similar limitation(s) as claim 30.

Conclusion

9.   Any response to this action should be mailed to:

        Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
        or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9306, (for informal or draft communications, and please label "PROPOSED" or "DRAFT")

Patent Correspondence delivered by hand or delivery services, other than the USPS, should be addressed as follows and brought to U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA, 22202

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (703) 305-5631. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-6954.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: ebc@uspto.gov. For general information about the PAIR system, see http://pair-direct.uspto.gov.

QH/qh
December 9, 2004

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER